APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/826,310	04/03/2001	Douglas M. Winneg	S01400/70001DPM	4169

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WOLF GREENFIELD & SACKS, PC
FEDERAL RESERVE PLAZA
600 ATLANTIC AVENUE
BOSTON, MA 02210-2211

EXAMINER
ARANI, TAGHI T

ART UNIT	PAPER NUMBER
2131	

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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	09/826,310	WINNEG ET AL.
Office Action Summary	Examiner	Art Unit
	Taghi T. Arani, Ph.D.	2131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on <u>03 April 2001</u>.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-90* is/are pending in the application.
   4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) *1-90* is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☐ All   b) ☐ Some * c) ☐ None of:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. _____.
    3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
       application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claims 1-90 are pending for examination.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-12, 15-26, 29-40, 43-54, 57-69, 72-85, 88-90 are rejected under 35 U.S.C. 102(a)

as being anticipated by WO 99/36848 published July 1999.

As per claims 1, 44, 57,59, 74 and 88, WO 99/36848 from EXAMSOFT WORLDWIDE

INC. (hereinafter "EXAMSOFT") teaches a method/apparatus of securely executing on a computer

system an application for receiving, from a user of the computer system, at least one response to at

least one question of an examination, the computer system comprising an input device and a display

device for displaying content to the user, the method comprising acts of [abstract]:

(A)   executing the application on the computer system, comprising displaying an

area on the display device in which the user can enter a response to at least one question of the

examination, and enabling the user to use the input device to input a response for one or more of the

questions into the displayed area [page 2, lines 5-8, Fig. 1, page 9, lines 14-17]; and

(B)   prohibiting the computer system from accessing any unauthorized content

during execution of the application and from displaying any authorized content to the user during

execution of the application [page 2, lines 8-19, i.e. executable instructions for, closing unauthorized

programs, filtering user commands to prevent unauthorized access to files stored on the computer].

As per claims 2, 58, 75 and 89, EXAMSOFT teaches the method/apparatus of claims 1, 44 and 74 respectively, wherein act (A) further comprises an act of displaying the at least one question of the examination on the display device [page 4, lines 3-5, i.e. the exam application's own easy to use word processor, page 9, lines 14-17, i.e. multiple choice examination].

As per claim 3 and 45, 76, EXAMSOFT teaches the method/apparatus of claims 1, 44 and 74 respectively, wherein prior to performance of act (A), one or more unauthorized processes are executing on the computer system [page 7, lines 21-22, i.e. identifying already running processes], wherein act (B) comprises an act of terminating the one or more unauthorized processes prior to performing act (A) [page 8, lines 6-10, i.e. unauthorized processes are either closes or hidden].

As per claim 4 and 46, 61 and 77, EXAMSOFT teaches the method/apparatus of claims 1, 44, 59 and 74 respectively, wherein act (B) comprises an act of (1) configuring the application such that unauthorized content cannot be accessed by the application [page 8, lines 10-16, lines 18-19, i.e. configuring the Windows for optimum security].

As per claim 5, 47 and 78, EXAMSOFT teaches the method/apparatus of claims 4, 46 and 77 respectively, wherein act (B)(1) comprises an act of configuring the application such that unauthorized processes cannot be initiated by the application [page 8, i.e. updating the .INI files to reflect the changes made by the exam application such as terminating or hiding the Explorer windows].

As per claims 6, 48 and 79, EXAMSOFT teaches the method/apparatus of claims 1, 44 and 74 respectively, wherein act (B) comprises an act of (1) prior to executing act (A), disabling any functions on the computer system capable of performing at least one of the following: accessing unauthorized content and displaying unauthorized content to a user of the computer system [page 8,

lines 18-20, i.e. the exam application terminates or hides Explorer and turns off screen savers, power

management, the desktop wall paper, sets the desktop icons invisible].

As per claim 7,49 and 80, EXAMSOFT teaches the method/apparatus of claims 6, 48 and

79 respectively, wherein act (B)(1) comprises an act of disabling any functions on the computer

system that are capable of initiating unauthorized processes on the computer system [page 8, lines

22-23, i.e. disabling the task bar in WIN9x and NT versions]

As per claim 8, 50 and 81, EXAMSOFT teaches the method of claims 1, 44 and 79

respectively, wherein act (B)(1) comprises an act of configuring one or more programming hooks of

the computer system [page 9, lines 1-4].

As per claim 9, 51, 60 and 82, EXAMSOFT teaches the method/apparatus of claims 1, 44,

59 and 74 respectively, wherein act (B) comprises an act of (1) during execution of the application,

terminating any detected unauthorized processes [page 13, claim 4].

As per claims 10, 52 and 83, EXAMSOFT teaches the method/apparatus of claims 9, 51

and 79 respectively, further comprising:

recording each detection of an unauthorized process [page 10, lines 9-15, i.e. test taking

statistics and storing in an auxiliary information file].

As per claims 11, 53 and 84, EXAMSOFT teaches the method/apparatus of claims 9, 51

and 79 respectively, wherein act (B)(1) comprises acts of (a) detecting any processes executing on

the computer system during execution of the application [page 9, lines 5-12, lines 19-23 i.e. setting

hooks and monitoring all keystrokes and other user input as the examination proceeds]. (b) for each

detected process, determining if the detected process is authorized to execute on the computer

system during execution of the application [page 9, lines 20-22, i.e. the Exam application records the

details of all intercepted hooked messages, such as attempts to call unauthorized applications or access unauthorized data], and (c) for each detected process, if the detected process is unauthorized, terminating the detected process [page 13, wherein the step of intercepting messages determines whether the messages would lead to access of an unauthorized file and modifies [i.e. terminates] those intercepted messages that would lead to access of an unauthorized file, page 13, claim19a) , i.e. closing undesired processes running on the computer].

As per claims 12, 54 and 85, EXAMSOFT teaches the method/apparatus of claims 11, 53 and 84 respectively, wherein the computer system comprises a registry that lists all processes currently executing on the computer system [page 7, lines 21-25], and act (B)(1)(a) comprises an act of periodically accessing the registry on the computer system at predefined intervals to ascertain the processes currently executing on the computer system [page 10, lines 4-19].

Claims 15-26 are apparatus claims corresponding to method claims 1-12. Claims 15-26 are rejected for the same reasons provided in the statement of rejections of claims 1-12 above.

Claims 29-40 are apparatus claims corresponding to the method claims 1-12. Claims 29-40 are rejected for the same reasons provided in the statement of rejections of claims 1-12 above.

Claims 43 and 90 are computer program products corresponding to the method claims 1 and 74 respectively. Claims 43 and 90 is rejected for the same reasons stated in the statement of rejections of claims 1 and 74 above.

Allowable Subject Matter

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 13-14, 27-28, 41-42, 55-56, 70-71 and 86-87 rejected under 35 U.S.C. 103(a) as being unpatentable over EXAMSOFT as applied to claims 1, 15, 29, 44, 59, 74 above and further in view of Kisor et al., US Patent 6,266,73, issued July 2001.

As per claims 13 and 14, EXAMSOFT fails to teach:

(C) managing a list of unauthorized processes, wherein act (B)(1)(b) comprises an act of, for each detected process, comparing the detected process to the list of unauthorized processes, and wherein act (B)(1)(c) comprises, for each detected process, terminating the detected process if the detected process is on the list , recited in claim 12.

(C) managing a list of processes authorized to be executed on the computer system, wherein act (B)(1)(b) comprises an act of, for each detected process, comparing the detected process to the list of authorized processes, and wherein act (B)(1)(c) comprises, for each detected process, terminating the detected process if the detected process is not on the list, recited in claim 13.

However, Kisor et al. teach a computer security system and method wherein an event detector detects events (i.e. processes) occurring in a monitored computer system [abstarct].

Kiser et al teach managing a list of unauthorized processes and a list of processes authorized to be executed on the computer system comprises an act of , for each detected process, comparing the detected process to a list of unauthorized processes and comparing the detected process to a list of authorized processes [col. 2, lines 54-67.

Kiser et al. further teach an action generator to determine an approperaitate action [such as killing the process , col. 3, lines 42-50, such as terminating the detected process].

It would have been obvious to one of ordinary skill in the art to modify EXAMSOFT's invention with the teaching of Kisor et al's computer security system to not only restrict access to the secure contents in EXAMSOFT's secure exam system, but also to take other action in response to detection of an event [col. 1, lines 29-37, see also Fig. 2, elements 46, 48 and 50 (Kisor et al.)].

Claims 27-28, 41-42, 55-56, 70-71 and 86-87 are apparatus claims corrersponding to the method claims 13-14. Claims 27-28, 41-42, 55-56, 70-71 and 86-87 are also rejected for the same reasons stated in the statement of rejections of claims 13-14 above.

Conclusion

Prior arts made of record, not relied upon:

US 5, 293,422 is directed to a system for making computer software consumable, wherein the completion of units of computer software is monitored by means of a copy-protected region of a recording medium.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Taghi T. Arani whose telephone number is (571) 272-3787. The examiner can normally be reached on 8:00-5:30 Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR system,

see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system,

contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Taghi T. Arani, Ph.D.
Examiner
Art Unit 2131

AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100